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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/023,675

12/18/2001

Andrew Mark Player

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02/23/2006

LAW OFFICE OF GERALD MALISZEWSKI

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EXAMINER

CHANG, RICHARD

ART UNIT

PAPER NUMBER

2663

DATE MAILED: 02/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/023,675

Applicant(s)

PLAYER ET AL

Examiner

Richard Chang

Art Unit

2663

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 November 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-2, 6-10, 12-16, 20-24 and 26-28 is/are rejected.
- 7) ☒ Claim(s) 11 and 25 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. Applicant's arguments and amendments with respect to claims 1-2, 6-16 and 20-28 have been fully considered but are moot in view of the new ground(s) of rejection.

Claims 3-5 and 17-19 had been canceled.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-2, 6-10, 12-16, 20-24 and 26-28 are rejected under 35 U.S.C. 102(e) as being anticipated by US patent No. 20010053161 A1 ("Tomizawa et al.").

Regarding claims 1, 14-15 and 28, Tomizawa et al. teaches a G.709 network (Optical Transport Network as OTN, See page 2, paragraph [0030]) of connected integrated circuits (See page 2, paragraph [0030]), a method for paralleling data streams (via channel 60's, See Fig. 3B), the method comprising of receiving a first digital wrapper data stream (40Ghz incoming serial data stream) having a frame format (Synchronous Digital Hierarchy format), overhead byte and a first data rate (40Ghz incoming rate, See Fig. 3B, page 2, paragraph [0030]),

demultiplexing the first data stream (40Ghz incoming serial data stream) into a second plurality of digital wrapper data streams (channel frame) having a second data rate (2.4 Gbps rate), less than the first data rate (40 Gbps rate) and synchronizing overhead bytes (channel frame overhead bytes) in the second plurality of data streams to overhead bytes (section overhead bytes) in the a first data stream, and

processing the second plurality of data streams (60) at the second data rate (2.4 Gbps rate) in response to synchronizing the overhead bytes (See Fig. 3B, page 4, paragraph [0064-0065]).

Regarding claims 2 and 16, Tomizawa et al. further teaches that following the processing of the second plurality of data streams (via channel frames), supplying a second plurality of processed data streams having the second data rate (2.4 Gbps rate),

multiplexing the second plurality of data streams into a first processed data stream having the first data rate (40 Gbps rate), and

transmitting the first processed data stream (See Fig. 3A, page 3, paragraph [0060]).

Regarding claims 6 and 20, Tomizawa et al. further teaches that receiving messages in a frame format with overhead bytes includes receiving frame alignment signal bytes in the overhead of every frame (channel frame), and

wherein synchronizing overhead bytes in the second plurality of data streams (2.4 Gbps rate) to overhead bytes in the first data stream (40 Gbps rate) includes synchronizing frame alignment signal bytes (A1 bytes) in each of the second plurality of

data streams (channel frame overhead) to the frame alignment signal bytes in the first data stream (section overhead byte) (See Fig. 12, page 5, paragraph [0080-0081]).

Regarding claims 7 and 21, Tomizawa et al. further teaches that supplying a second plurality of processed data streams (2.4 Gbps rate) includes supplying messages in a frame format with overhead bytes (channel frame overhead bytes), and wherein transmitting the first processed data stream (40 Gbps rate) includes transmitting messages in a frame format with overhead bytes (section overhead byte) (See Fig. 12, page 5, paragraph [0080-0081]).

Regarding claims 8 and 22, Tomizawa et al. further teaches that supplying a second plurality of processed data streams includes supplying a frame start signal with each of the second plurality of processed data streams (2.4 Gbps rate), and wherein multiplexing the second plurality of processed data streams into the first processed data stream (40 Gbps rate) includes multiplexing in response to the second plurality of frame start signals (frame pulse position) (See Fig. 3B, page 4, paragraph [0075]).

Regarding claims 9 and 23, Tomizawa et al. further teaches that multiplexing the second plurality of processed data streams (2.4 Gbps rate) into the first processed data stream (40 Gbps rate) includes synchronizing overhead bytes in the first processed data stream (section overhead byte) to the overhead bytes in the second plurality of processed data streams in response to the frame start signals (frame pulse position) (See Fig. 12, page 5, paragraph [0080-0081]).

Regarding claims 10 and 24 Tomizawa et al. further teaches that

supplying a second plurality of processed data stream messages in a frame format with overhead bytes includes supplying frame alignment signal bytes in the overhead of every frame, and

wherein synchronizing overhead bytes in the first processed data stream (40 Gbps rate) to overhead bytes in the second plurality of processed data streams (2.4 Gbps rate) includes synchronizing frame alignment signal bytes in the first processed data stream (40 Gbps rate) to frame alignment signal bytes (channel frame overhead bytes) in each of the second plurality of processed data streams (2.4 Gbps rate) (See Fig. 11, page 2, paragraph [0074]).

Regarding claim 12-13 and 26-27, Tomizawa et al. further teaches that

receiving a first digital wrapper data stream having a first data rate includes receiving the first data stream at approximately a 40-gigabits per second data rate (before demultiplexer 51), and

wherein demultiplexing the first data stream into a second plurality of digital wrapper data streams having a second data rate, less than the first data rate, includes demultiplexing the approximately 40-gigabits per second data stream into 4 data streams having approximately a 10-gigabits per second rate (after demultiplexer 52, See distribution of semiconductor stage by demultiplexing circuit, See Fig. 11, page 5, paragraph [0079]).

Allowable Subject Matter

4. Claims 11 and 25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the

limitations of the base claim and any intervening claims and if no art rejection can be applied.

Reason for indicating Allowable Subject Matter

5. The following is a statement of reasons for the indication of allowable subject matter: The prior art along or in combination fails to teach or make obvious the following limitations:

“following the supplying of the second plurality of processed data streams, comparing each of the second plurality of processed data stream frame start signals, phase matching the second plurality of frame start signals, deskewing the second plurality of processed data streams to match their corresponding frame start signals, and wherein multiplexing the second plurality of processed data streams into the first processed data stream includes multiplexing the deskewed second plurality of processed data streams.” as recited in the dependent claims 11 and 25.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard Chang whose telephone number is (571) 272-3129. The examiner can normally be reached on Monday - Friday from 8 AM to 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on (571) 272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

rkc

Richard Chang
Patent Examiner
Art Unit 2663


RICKY Q. NGO
SUPERVISORY PATENT EXAMINER